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GJA7 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1547a

Product Information

Application	WB, IHC-P, E
Primary Accession	P36383
Other Accession	A4GG66, A4GVD1, P28229, Q6R4A8
Reactivity	Human
Predicted	Hamster, Mouse, Pig, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1380
Calculated MW	45470
Antigen Region	89-120

Additional Information

Gene ID	10052
Other Names	Gap junction gamma-1 protein, Connexin-45, Cx45, Gap junction alpha-7 protein, GJC1, GJA7
Target/Specificity	This GJA7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-120 amino acids from the N-terminal region of human GJA7.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GJA7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GJC1
Synonyms	GJA7

Function	Structural component of the gap junction, a specialized intercellular structure consisting of a cluster of closely packed pairs of transmembrane channels, the connexons, that allow passage of small molecules and electrical signals between neighboring cells. Forms homotypic and heterotypic channels gated by transjunctional voltage (By similarity). Involved in intercellular innate immune signaling. Mediates translocation of 2',3'-cGAMP and 2',5'-oligoadenylates (2-5A) second messengers from virus-infected cells to macrophages and uninfected neighboring cells to propagate and amplify the antiviral immune response (PubMed:24077100, PubMed:31992625, PubMed:40010341).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell junction, gap junction

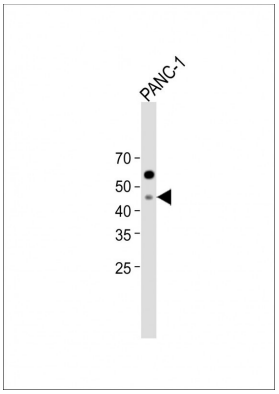
Background

Gap junctions were first characterized by electron microscopy as regionally specialized structures on plasma membranes of contacting adherent cells. These structures were shown to consist of cell-to-cell closely packed transmembrane channels. Proteins, called connexins, purified from fractions of enriched gap junctions from different tissues differ. Connexins are designated by their molecular mass. Another system of nomenclature divides gap junction proteins into 2 categories, alpha and beta, according to sequence similarities at the nucleotide and amino acid levels. For example, CX43 is designated alpha-1 gap junction protein, whereas CX32 and CX26 are called beta-1 and beta-2 gap junction proteins, respectively. This nomenclature emphasizes that CX32 and CX26 are more homologous to each other than either of them is to CX43. Connexins have four transmembrane, three intracellular, and two extracellular regions. Different tissues express different connexins, though tissue specificities overlap, and a given tissue or cell can express several different connexins. Developmental regulation of at least some of the connexin genes has been found. Embryo implantation is regulated in part by temporally changing patterns of expression of connexins in the embryo and the maternal decidua.

References

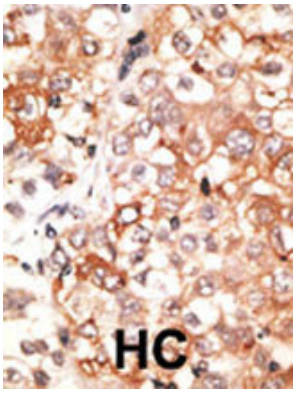
Xiang, Q., et al., Ai Zheng 21(6):593-596 (2002).
Kanter, H.L., et al., J. Mol. Cell. Cardiol. 26(7):861-868 (1994).
Kaba, R.A., et al., Cell Commun. Adhes. 8 (4-6), 339-343 (2001).

Images



All lanes: Anti-GJA7 Antibody (N-term) at1:1000 dilution + PANC-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 45 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma;



HC = hepatocarcinoma.

Citations

- Connexins and steroidogenesis in mouse Leydig cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.